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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/817,641

03/26/2001

Dejian Zhou

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8711

7590

09/22/2005

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EXAMINER

CHOW, MING

ART UNIT

PAPER NUMBER

2645

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/817,641		ZHOU, DEJIAN	
	Examiner		Art Unit	
	Ming Chow		2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30,32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1-30, 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Mo (US: 6137875).

For claims 1, 4, 12, 22, 24, 25, 29, 32, Mo teaches on column 4 line 1-3 determining whether a trunk is available on the free list (reads on claimed “a storage element”).

Therefore, this determination determines other trunks (vs. the trunk is available) are most likely to be used. In response to the determination, and so the least likely to be used trunk is selected.

Mo teaches on column 2 line 60-62 administration module (claimed 'controller') determines which trunk is available.

Mo teaches on Fig. 2 when FIFO is determined to have precedence (priority), the sub-trunk group (item 202 Fig. 2) is more likely to be used by switch module 13 of Fig. 2. Therefore, switch module 11 of Fig. 2 selects another trunk from sub-trunk group (item 200 of Fig. 2).

Regarding claims 2, 15, 23, 26, Mo teach on item 204 Fig. 2 main queue where lists available trunks for the first switch. Mo teaches on item 206 Fig. 2 shadow queue lists available trunks for the second switch. There must be identifiers in the main queue and shadow queue to identify trunks.

Regarding claims 3, 13, 19, Mo teaches on column 3 line 44-46 and Fig. 2 both ends of a trunk group hunt an idle trunk. The FIFO mechanism reads on the claimed "least idle algorithm". The LIFO mechanism reads on the claimed "most idle algorithm".

Regarding claims 5, 17, 27, Mo teaches on steps 308, 316, the result of "YES" reads on claimed "select one trunk". Mo teaches on steps 318, 310, decrement idle count (reads on claimed "remove an identifier of one trunk").

Regarding claims 6, 7, 18, 28, Mo teaches on Fig. 4 increment free count (reads on claimed "return an identifier of a released trunk").

Regarding claims 8, 16, see on column 4 line 10-44. The member number of Mo is the claimed “identifier”.

Regarding claims 9, 20, Mo teaches on column 3 line 48-54 Forward Linear and Backward Linear algorithms.

Regarding claims 10, 21, Mo teaches FIFO (claimed “clockwise circular queue”) and LIFO (claimed “counter-clockwise circular queue”). A circular queue is a FIFO or a LIFO queue that is logically represented in a circular fashion.

Regarding claim 11, Mo teaches on step 316 Fig. 3. Switch 1 of Fig. 1, identifies available and unavailable trunks (reads on claimed “track trunk selections”) when trunks are used by switch 3 (claimed “second switch”) of Fig. 1 as a priority trunk group.

Regarding “the controller determines if the indicated at least one available trunk will be used by the second switch system based on the stored information”, see rejections stated in claim 1 above.

Regarding claim 14, all rejections as stated in claims 1 and 2 above apply.

Item 204 of item 51 in Fig. 2 is the claimed first queue which arranges identifiers in FIFO order. Item 206 of item 53 in Fig. 2 is the claimed second queue which arranges identifiers in LIFO order (different arrangement from the first queue).

Mo teaches on step 308 Fig. 3, when the outcome of step 308 is “NO” the trunks have all been selected by switch module 11 and it reads on claimed “selecting a first trunk from available trunks in the first queue”. Also, step 308 of Fig. 3 uses the second queue (LIFO) to predict if the first trunk selected from the first queue (FIFO; item 204 of item 51) will conflict with a trunk to be selected by the second queue (switch system). When the outcome of step 308 is “NO”, it predicts the trunk that has been selected by switch 11 will have a conflict with a trunk in the second queue (LIFO; item 206 of item 53 in Fig. 2) if selected by switch 13.

Regarding claim 30, all rejections as stated in claims 1 and 2 above apply.

Response to Arguments

2. Applicant's arguments filed on 6/27/05 have been fully considered but they are not persuasive.
 - i) Applicant argues, on page 9, regarding “selecting another trunk in response to determining that the at least one available trunk will be used by a second switch system”. In addition to rejections stated above for claim 1, Mo teaches on steps 324 and 332 of Fig. 3. The “NO” result of step 324 is a determination that the FIFO trunk will be used. In response to the determination the process proceeds to step 332 where

the controller selects another trunk. Regarding “storage element”, see rejections stated above.

- ii) Applicant argues, on page 10, regarding claim 5. When an identifier of a trunk is removed (indicating the trunk is not available) from a shadow queue (i.e., LIFO queue), the main queue (i.e., FIFO queue) also recognizes the trunk is not available (claimed “the identifier of the trunk is also removed from the main queue”). This is what Mo teaches on steps 302, 322, 338 of Fig. 3.
- iii) Applicant argues, on page 11, regarding claim 8. Mo teaches on column 1 line 54-56, when both switches seize the same trunk (reads on both “an identifier in a first entry of the main queue” and “an identifier in a corresponding entry in the shadow queue), a comparison must be made in order to determine which identifier has higher precedence algorithm.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2645

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

3. Any inquiry concerning this application and office action should be directed to the examiner Ming Chow whose telephone number is (571) 272-7535. The examiner can normally be reached on Monday through Friday from 8:30 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached on (571) 272-7547. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service whose telephone number is (571) 272-2600. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

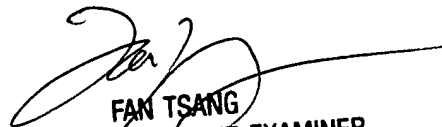
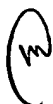
Washington, D.C. 20231

Or faxed to Central FAX Number 571-273-8300.

Patent Examiner

Art Unit 2645

Ming Chow



FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600